INCH-POUND

A-A-52032A 10 February 1994 SUPERSEDING A-A-52032 16 May 1991

CONTAINER, CARGO,

END OPENING

The General Services Administration has authorized the use of this commercial item description.

This item description covers 20-foot, reusable, ISO ICC, end opening, cargo containers for the transportation, distribution, and storage of military supplies.

Salient characteristics

<u>Description</u>. The container shall be noncollapsible, of a permanent character and suitable for repeated use. The container shall be a steel 8 foot 6 inch ISO 1CC container with end opening doors. The container shall comply with the requirements of ISO 1496/1.

<u>Weight</u>. ratings and <u>dimensions</u>. The tare weight of the container shall be the minimum practical but shall not exceed 5,500 pounds. The gross weight rating shall be 52,910 pounds. Dimensions, tolerances, and diagonal differences of the container shall meet the requirements for a 20 foot nominal length containers as specified in ISO 668.

<u>Standard product</u>. Except as otherwise specified herein, the container shall be the standard product of the contractor. The container shall be new and unused.

<u>Material</u>. Material shall be as specified herein. Used, rebuilt or remanufactured components, pieces, and parts shall not be incorporated into the container. Materials not specified shall be in accordance with federal, military, or National Technical Society, association or institute specifications or standards.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and other data which may improve this document should be sent to: US ARMY BELYOIR RDE GIR, ATTN SATBE TSE, FT BELYOIR VA 22060-5818.

AMSC N/A SSTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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- Material deterioration, prevention and control. The container shall be fabricated from compatible materials, inherently corrosion resistant or treated to provide protection against the various forms of corrosion and deterioration that may be encountered in any of the applicable operating or storage environments to which the container may be exposed.
- <u>Dissimilar metals</u>. Dissimilar metals shall not be used in intimate contact with each other unless protected against galvanic corrosion.
- <u>Identification of materials and finishes</u>. The contractor shall identify the specific material, material finish or treatment for use with component or subcomponent, and shall make information available upon request to the contracting officer or designated representative.
- Construction. The container shall be constructed so as to be free of any recesses and voids in which contraband can be concealed or where moisture can accumulate. No part of the container (when empty) shall protrude beyond the outside surfaces of the corner fittings.
- <u>Steel requirement</u>. The container shall be constructed of a high-strength low alloy (HSLA) structural steel conforming to ASTM A 588, grade A, HSLA structural tubing conforming to ASTM A 847, and sheet steels conforming to ASTM A 606, type 4.
- Doors. Two doors shall be hung within the rear end frame and shall provide clear opening conforming to the dimensions of ISO 668. Heavy duty pin hinges, recessed within the corner post shall be provided on each door allowing the door to fold back against the side of the body. Steel hinges shall have corrosion resistant steel pins. Each door shall be provided with not less than two heavy-duty, handle operated cam locking devices with anti-rack provisions which through lever type action aid in releasing the door seal from the door frame. Each locking device handle must be capable of accepting a padlock and security seal. Means shall be provided to hold the doors in the full open position and shall be of a material which will not scrape or chafe the container when the doors are closed. The doors, when closed, shall be sealed in such a manner as to prevent moisture entry into the container. All moving parts of the door locking mechanism and door hinges shall be permanently lubricated.
- Load retainers. When specified (see notes), two load retainers, one left and one right, shall be welded to the interior of the door end corner posts as specified in figure 1. Each retainer shall be fabricated from 1-1/4 inch by 1-1/4 inch by 1/4 inch thick structural steel angle. Each retainer shall be a minimum of 89 inches in length and shall extend from the top of the door sill to the base of the top corner fitting. The left load retainer shall be welded to the interior of the left door end corner post and the right load retainer shall be welded to the interior of the right door end corner post. The door opening width shall be a minimum of 89-1/2 inches after installation of the retainers. The reduced interior clearance shall not be cause for rejection of the container in complying with ISO standards as long as the container satisfies ISO standards prior to the retainer installation.

- Side walls and end walls. The steel side walls and end walls may be of the interior or exterior post type, corrugated or of smooth skin construction. The end walls and side walls shall withstand loading in accordance with ISO 1496/1 except each end wall shall withstand an internal loading equal to the full payload uniformly distributed over the surface of the end wall.
- Floor. The floor shall be fabricated of hardwood or marine grade plywood. A maximum of four sheets of marine grade plywood shall be used. The floor shall be attached to the crossmembers by countersunk fasteners, 1/4 inch minimum shank diameter, either of the self-tapping screw type, or machine screws with self-locking nuts and shall be installed so that each head is 0 to 1/15 inch below the board surface and at least 1 inch from the board edge. The floor boards shall be attached to each crossmember by means of at least three fasteners per board, for boards equal to or over seven inches wide, and two fasteners per board, per crossmember, for boards less than seven inches wide. Fasteners shall not exceed ten inches center to center distance. The floor shall be installed to permit lateral variations in floor board width due to swelling. The floor shall be watertight. All wood components shall be chemically treated in accordance with the regulations as stated by the "Commonwealth of Australia Department of Health." A data plate shall be affixed to the container indicating the immunization code used in the treating process.
- <u>Understructure</u>. After painting of the metal surfaces, the entire underside of the container floor, including floor boards, crossmembers, corner fittings, side rails, and end frame members shall be coated with a bituminous undercoat applied to a minimum dry film thickness of 6 mils (150 microns).
- Bottom rail protection. An open recess shall be provided for protection against damage of the bottom side rails and bottom end rails in the vicinity of the bottom corner fittings. The open recesses shall be a minimum of 2 inches in height by 6 inches in length.
- Forklift peckets. Forklift pockets for handling loaded and unloaded containers shall be furnished. Forklift pockets shall conform to the requirements of ISO 1496/1. Above the inside pockets (unloaded pockets) the following warning shall be letter stenciled or letter decals in minimum 3 inch letters: "EMPTY LIFT ONLY".
- Roof. The roof shall be of corrugated construction, self-draining and shall conform to ISO 1496/1. A reinforced zone shall be provided for protection of the roof against damage in the vicinity of the top corner fittings. The reinforced zone shall extend a minimum of 18 inches from the outside faces of each top corner fitting. The minimum metal thickness of the reinforced zone shall be 1/4-inch.
- Corner fittings. Corner fittings shall conform to the requirements of ISO 1161.
- Anti-piferage provisions. Hinge-pins and screws, bolts, and other fasteners used for securing the hinges and closing devices to the container and for holding the essential parts of the sides, ends and roof, shall be welded or otherwise secured in such a manner as to prevent access to the interior of

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container without leaving visible signs of tampering. Where such welding destroys protective coating on the items being welded or on other container parts, the weld and surrounding area shall be thoroughly cleaned, treated, and painted. All locking device handles shall be furnished with provisions for padlocking and customs sealing.

- Interior marking. The owner's code and serial number shall be stamped or bead welded in characters not less than 1/2 inch high on the interior surface of the door end top rail (header). The number shall be located on either the top left corner fitting or within an area of 18 inches from the left corner post where it will not be obscured.
- Placard holder. When specified (see notes), four stainless steel placard holders conforming to DOT, BOE-6000, part 172, appendix C, shall be provided. One placard holder shall be located on each end and each side of the container. Placard holders shall be permanently attached and shall not protrude beyond the outer surfaces of the corner fittings. The holders shall be located a minimum of 3 inches away from all other container markings. When design permits, the placard holders shall be located within a recessed area of the container.
- Approval plates. An International Convention for Safe Containers (CSC), Transport International des Routiers (TIR), and Timber Component Treatment Requirements of the Australian Department of Health (TCT) plates or plaques shall be applied for and obtained from a designated approval authority, attached and displayed as required, by the convention in accordance with CFR 49, parts 450 and 451. Any additional requirements of the approval authority shall be met. Each container shall be affixed with the seal of the approval authority.
- <u>Performance</u>. The container shall conform to the requirements specified in ISO 1496/1 without damage or permanent deformation.
- Surface preparation. All steel components both inside and out, shall be abrasively blasted to a near white Steel Structure Painting Council (SSPC) -10. Equivalent chemical cleaning may be proposed. The cleaned surface shall be free from oil, grease, dirt, mill scale, rust, corrosion products, oxides, paint or any other foreign matter. Very light shadows or very slight streaks caused by mill scale, oxides or other slight discolorations on the finished surface shall be acceptable. At least 95 percent of each square inch of surface area shall be free of all visible residues and the remainder shall be limited to the slight discoloration mentioned above.
- <u>Primer coat</u>. The primer coat shall be that which is commercially offered by the container manufacturer. The primer shall contain anticorrosive properties which shall retard the corrosion of the steel. The primer coat shall be applied to the dry film thickness recommended by the primer manufacturer.
- Top coat. The top coat shall compatible with the applied primer coat. The exterior finish color shall be in accordance with FED-STD-595, color number 33446 (tan). Interior finish color shall be light grey or white. The final coating thickness shall be in accordance with the manufacturer's recommendation

Marking. The container shall be marked in accordance with ISO 6346. Each exterior wall of the container shall be marked, "PROPERTY OF U.S. ARMY", minimum three inch high letters. the upper quadrant of each exterior wall shall be marked with a United States flag with minimum dimensions of 8 inches in height by 12 inches in length. All markings shall have a minimum five year life.

<u>Morkmanship</u>. All parts, components, and assemblies of the container including castings, forgings, molded parts, stampings, seals and sealing agents, machined surfaces, and welded parts shall be clean and free from any defects that will reduce the capability of the container to meet the requirements specified herein. Any components and assemblies which have been repaired or modified to overcome deficiencies shall not be used without prior specific approval of the contracting officer. External surfaces shall be free from burrs, slag, sharp edges, and corners except where sharp edges and corners are required. The internal cargo space shall be free from sharp protrusions that could damage cargo or personnel.

Metal fabrication. Metal used in the fabrication of equipment shall be free from kinks and sharp bends. The straightening of material shall be done by methods that will not cause injury to the metal. Shearing and clipping shall be done neatly and accurately. Corners shall be square and true. Flame cutting, using a tip suitable for the thickness of the metal, may be employed instead of shearing or sawing. Burned surfaces or flame-cut material shall be free of slag. All bends of a major character shall be made with controlled means in order to insure uniformity of size and shape. Precautions shall be taken to avoid overheating, and heated metal shall be allowed to cool slowly.

Bolted and riveted connections. Bolt and rivet holes shall be accurately punched or drilled and shall have the burns removed. Washers, lockwashers, or lock nuts shall be provided where necessary and all bolts, nuts, and screws shall be tight. Rivet heads, when not countersunk or flattened, shall be uniform in size and shape for the same diameter of rivet concentric with the rivet holes, and in full contact with the surface of the member.

Regulatory requirements. In accordance with federal Acquisition Regulation, section 23.403, the Government's policy is to acquire items composed of the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition without adversely affecting performance requirements or exposing the supplier's employees to undue hazards from the recovered materials.

<u>Metric products</u>. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch-pound units, provided they fall within specified tolerances using conversion tables contained in the latest revision of FED-STD-376, and all other requirements of this Commercial Item Description are met.

Contractor certification. The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this commercial item description, and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices. The Government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

Preservation, packing and marking. Preservation and packing are not required. Marking shall be as specified in the contract or order.

<u>Motes</u>. The procuring agency should specify the preferred options permitted herein and include the following information in procurement documents:

- 1. Title, number, and date of this item description.
- 2. Owner's code and serial number for each container.
- 3. When this commercial item description is used for procurement, the commercial item certification clause must appear in the solicitation.
- 4. When load retainers are required.
- 5. When placard holders are required.

Copies of FED-STD-376 and FED-STD-595 are available from: STDZN DCMNT ORDER DESK, BLDG 4D, 700 ROBBINS AVE, PHILADELPHIA PA 19111-5094.

ASTM A588, ASTM A606, and ASTM A847 are available from: AMERCN SCTY & MTRLS, 1916 RACE STRET, PHILADELPHIA PA 19103.

Department of Transportation (DOT), Code of Federal Regulations, 450 and 451 and DOT, Bureau of Explosives, BOE-6000, part 172, appendix C are available from the SUPT OF DCMNTS, GVT PRINTG OFC. WASHINGTON DC 20402.

ISO 1496/1, ISO 1161, ISO 668, ISO 6346 are available from: AMERCN NATL STANDS INST, 1430 BROADWAY, NEW YORK NY 10018.)

SSPC-10 is available from: STL STRCT PAINT CNCL, 4400 50TH AVE, PITTSBURGH PA 15213-2683.

Copies of Federal Acquisition Regulation, section 23.403 are available from: SUPT OF DCMNTS, GVT PRINTG OFC. WASHINGTON DC 20402.

The contracting officer should require that three complete sets of approved blueprints/design drawings as stamped by the approval authority shall accompany all proposals submitted. A stamp of approval by the approval authority which is subject to satisfactory prototype test is acceptable.

The contracting officer should require that three complete sets of fully approved design drawings as stamped by the approval authority be submitted prior to the start of production. Recommend all changes be approved by the contracting officer in addition to the approval authority.

The contracting officer should require three complete sets of specifications accompany all proposals submitted. The contracting officer should require that three complete sets of specifications shall be submitted prior to the start of production. Recommend all changes must be approved by the contracting officer.

The contracting officer should require that three copies of the container finishing and surface preparation specifications accompany all proposals submitted. The contracting officer should require that three copies of the container finishing and surface preparation specifications be submitted prior to the start of production. Recommend that all changes must be approved by the contracting officer.

The following are suggested sources of supply (competition is not limited to these sources):

- Bahia Industrial SA, Ctra. N. IV M-CA, km 655'8, Puerto de Santa Maria, Caidz, Spain Telephone: (56) 86 32 42
- BN Constructions Ferroviaires et Metalliques, Vaartdijkstraat 5, 8200 Bruges 2, Belgium Telephone: (50) 38 37 51
- Cobra Containers SpA, Strada Roccadebaldi, P.O. Box 53, 12084 Mondovi, Italy Telephone: (174) 681101
- Containertechnik Hamburg GmbH & Co., Heilwigstrasse 107, 2000 Hamburg 20, Federal Republic of Germany Telephone: (40) 450 20 31
- Mid-States Metal Lines, 4001 East 13th Terrace, Grandview, MO 64030-2833 Telephone: (816) 765-5444
- Morteo SpA, Corso Andrea, Podesta B, 16128 Geona, Italy Telephone: (10) 53891
- Swedecon Mekaniska AB, Box 5044, S-831 05 Ostersund, Sweden Telephone: (63) 11 76 30
- Yorkshire Marine Containers Ltd., Belprin Rd, Beverley, North Humberside HU1/ OJZ, England Telephone: (0482) 869286

The preparing activity for this item description is the US ARMY BELYOTR RDE CTR, ATTN SATBE TSE, FT BELVOIR VA 22060-5818.

Custodian: Army - ME Preparing activity: Army - ME

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